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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,870	12/04/2003	Jorge E. Lopez de Cardenas	68.0425	7870

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EXAMINER

COLLINS, GIOVANNA M

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/727,870	Applicant(s) LOPEZ DE CARDENAS ET AL.	
	Examiner Giovanna M. Collins	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 3-7 is/are allowed.
- 6) ☒ Claim(s) 8-27 is/are rejected.
- 7) ☒ Claim(s) 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 8-15 and 22-27 is withdrawn in view of the newly discovered reference(s) to Tubel '489 and McCoy '399. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tubel 6281489 in view of McCoy 5117399.

Referring to claims 8, 11, 22-23, and 27, Tubel discloses a method for optimizing production comprising using measurements from different sensors including bottomhole flowing pressure sensors (see col. 3, lines 28-30) and reservoir pressure sensors (see col. 4, lines 1-20) in real time to optimize production. Tubel does not specifically disclose comparing the bottomhole flowing pressure and the reservoir pressure to determine an underbalance and adjusting the bottomhole pressure to maintain the level of underbalance in proximity to a maximum underbalance. McCoy teaches that an underbalance between the bottomhole flowing pressure and the reservoir pressure needs to be maintained at a certain level in order to obtain the maximum production from a well (col. 1, lines 42-43). As it would be advantageous to obtain the maximum production from a well, it would be obvious to one of ordinary skill in the art at the time

of the invention to modify the method disclosed by Tubel to comparing the bottomhole flowing pressure and the reservoir pressure to determine an underbalance and adjusting the bottomhole pressure to maintain the level of underbalance in proximity to a maximum underbalance in view of the teachings of McCoy.

Referring to claims 9-10, Tubel discloses continuously or periodically sensing the bottomhole flowing pressure and the reservoir pressure (col. 1, lines 31-35).

Referring to claim 12-15, 17 and 19-20, Tubel disclose automatically adjusting the pressure with a valve, choke or artificial lift mechanism (col. 3, lines 45-55).

Referring to claim 16, Tubel discloses (figs. 2-3) a system for optimizing production comprising a completion deployed in a wellbore having a flow control device (fig. 2, at 114, and fig. 3, at 214) to control the rate at which a fluid is produced in the well, a reservoir pressure sensor (see col. 4, lines 1-20) and a bottomhole flowing pressure sensor (see col. 3, lines 28-30). Tubel does not disclose a stability envelope to maintain a level of underbalance in proximity to a predetermined optimal underbalance. McCoy teaches that an underbalance between the bottomhole flowing pressure and the reservoir pressure needs to be maintained at a certain level (stability envelope) in order to obtain the maximum production from a well (col. 1, lines 42-43). As it would be advantageous to obtain the maximum production from a well, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Tubel to have a stability envelope to maintain a level of underbalance in proximity to a predetermined optimal underbalance in view of the teachings of McCoy.

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Referring to claims 18 and 21, Tubel discloses a computerized controller (fig. 2, at 142, fig. 3 at 242) to receive signal from the sensors and automatically adjust the flow control mechanism to adjust the bottomhole flowing pressure.

Referring to claims 24-26, Tubel discloses suspending a tubing (108 or 218) with a flow control mechanism (114 or 214).

Allowable Subject Matter

4. Claims 1, and 3-7 are allowed.
5. Claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 8-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


gmc


Jennifer H. Gay
Primary Examiner